

**Case 3456*****Nerita helicina* Brocchi, 1814 (currently *Euspira helicina*; Mollusca, Gastropoda, NATICIDAE): proposed conservation of usage of the specific name by the designation of a neotype**

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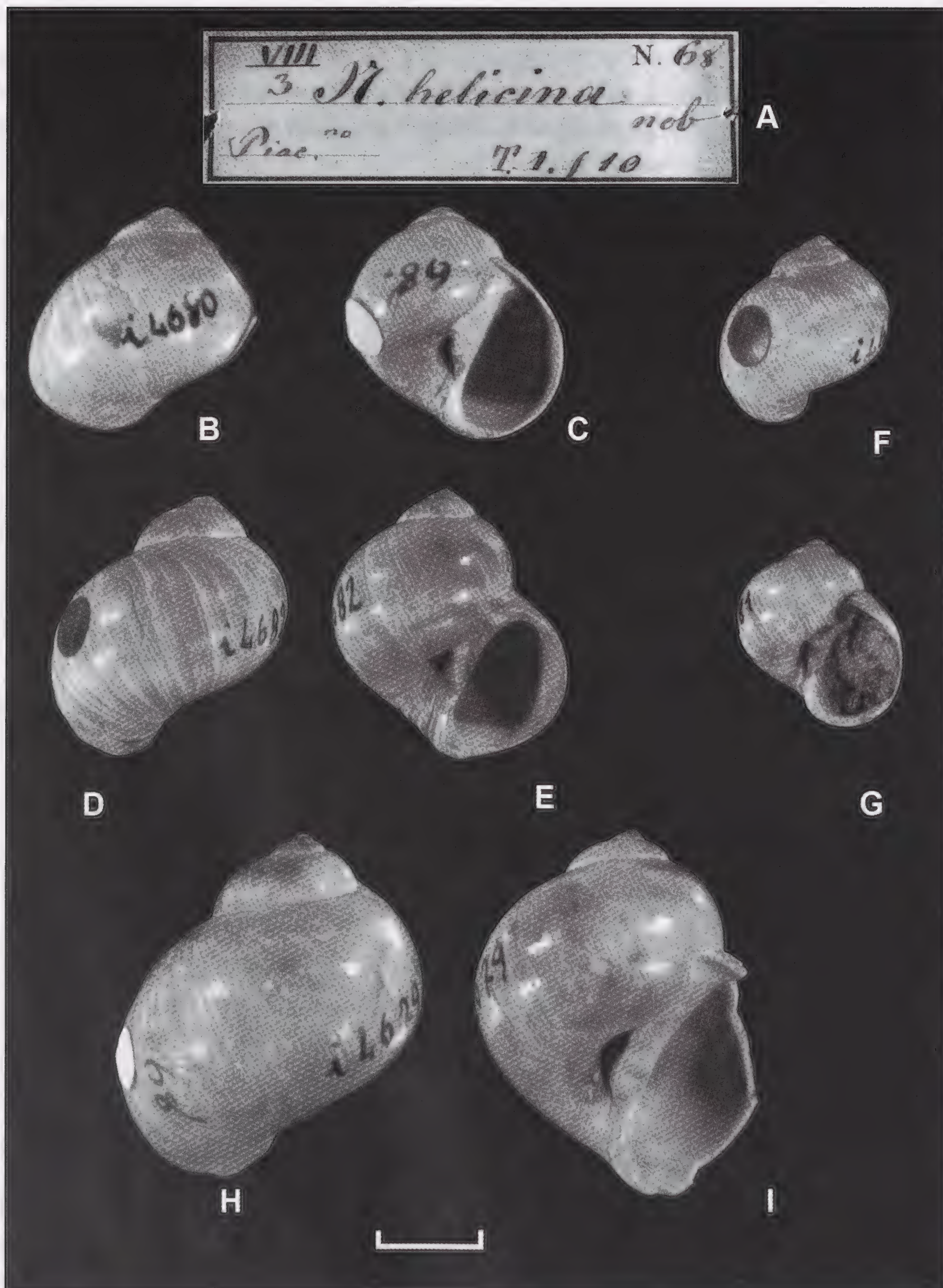
**Abstract.** The purpose of this application, under Article 75.6, is to conserve the current usage of the name *Euspira helicina* (Brocchi, 1814) for a species of naticine gastropod from the Pliocene of Piacenza area, Italy. The lectotype of *Euspira helicina* (Brocchi, 1814) is not in taxonomic accord with the current usage of this name and exhibits all the characters of *Tectonatica prietoi* (Hidalgo, 1873) leading to considerable confusion. It is proposed that the previous type fixations for the species *Euspira helicina* (Brocchi, 1814) be set aside and a neotype consistent with the current usage be designated.

**Keywords.** Nomenclature; taxonomy; NATICIDAE; *Euspira helicina*; *Tectonatica prietoi*; naticine gastropod; Pliocene; Piacenza area, Italy.

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1. *Nerita helicina* was established by Brocchi (1814, p. 297) on the basis of Pliocene shell material from an unspecified locality in the Piacenza area ('Fossile nel Piacentino'). In Brocchi's text there is no information about the number of specimens studied. The original diagnosis '*Testa solida subglobosa, anfractibus rotundatis distinctis, umbilico semiclauso, labio adnato, incrassato, calloso*', and the short descriptive notes and poor figure published by Brocchi (1814, pl. 1, fig. 10) failed to clarify the distinguishing characters of the species, and the interpretation of subsequent workers has followed the species concept outlined by Sacco (1891, p. 70). The species was quite frequently quoted, described and/or figured later on, and assigned to *Natica* Scopoli, 1777, *Lunatia* Gray, 1847 or *Polinices* Montfort, 1810 and more recently to *Euspira* Agassiz in Sowerby, 1837. Rossi Ronchetti (1955), in the frame of a revision work of Brocchi's 'types', dealing with *helicina*, described and figured (p. 161, fig. 82) a shell (i 4679 from Brocchi's material in Museo Civico di Storia Naturale di Milano) as 'holotype' of *Nerita helicina* (cited as '*Polynices (Lunatia) helicina* (Br.)'). No mention was made with regard to any selection among original specimens, but the shell is deemed to be the lectotype of *Nerita helicina* (Article 74.6 of the Code – Fixation of lectotype by inference of "holotype" or "the type" before 2000).





**Fig. 1.** Specimens labelled as *Nerita helicina* Brocchi, 1814 in the MSNM (scale bar = 10 mm). **A.** Brocchi's original handwritten label. **B.** i 4680, Piacentino (Piacenza area), abapertural view of specimen selected herein as neotype of *Nerita helicina* Brocchi, 1814; **C.** same, apertural view. **D.** i 4682, Piacentino (Piacenza area), abapertural view of specimen closely conforming to the concept of *Nerita helicina* Brocchi as used by later authors; **E.** same, apertural view. **F.** i 4681, Piacentino (Piacenza area), abapertural view of specimen matching the characters of *Natica prietoi* Hidalgo, 1873 (note the different shape of the umbilical callus in respect to i 4680 and i 4682); **G.** same, apertural view. **H.** i 4679, Piacentino (Piacenza area), abapertural view of specimen indicated as 'holotype' of *Nerita helicina* Brocchi, 1814 by Rossi Ronchetti (1955), but actually belonging to *Natica prietoi* Hidalgo, 1873 (note the different shape of the umbilical callus in respect to i 4680 and i 4682); **I.** same, apertural view.



2. Brocchi's material in Museo Civico di Storia Naturale di Milano (MSNM) consists of one box with four specimens (i 4679–i 4682); the box also contains the original manuscript label numbered 68 (Fig. 1). Examination of this material has shown that two distinct species are represented. Two shells, i 4680 (Fig. 1B, C) and i 4682 (Fig. 1D, E) conform perfectly to the concept of *Nerita helicina* followed for nearly two centuries by most authors and agree with the short description provided by Brocchi (1814). The other two, i 4679 (Fig. 1H, I) and i 4681 (Fig. 1F, G) exhibit all the characters (protoconch and teleoconch) of the uncommon naticine *Natica prietoi* (currently *Tectonatica prietoi*) Hidalgo, 1873 (p. 332). It is noteworthy that one of these latter shells (i 4679) is that indicated as 'holotype' of *Nerita helicina* by Rossi Ronchetti (1955). It is likely that Rossi Ronchetti (1955) was unaware of the fossil occurrence of *Natica prietoi*, at that time known only from modern environments (Hidalgo, 1873; Ancey, 1904) although since recorded from several Pliocene localities in Italy (Pedriali & Robba, 2008, p. 107). In these circumstances, the name *helicina* would be a source of considerable confusion. However, considering that the name *Nerita helicina* remains available (Article 17 of the Code) and that the existing name-bearing type of *Nerita helicina* is not in taxonomic accord with the prevailing usage of the name (Arduini, 1895; Almera & Bofill, 1898; Bongo, 1914; Cossmann & Peyrot, 1919; Harmer, 1921; Glibert, 1952 a, b; Baldi, 1960; Kojumdjieva & Strachimirov, 1960; Venzo & Pelosio, 1963; Pelosio, 1967; Robba, 1968, 1981; Mastroianni, 1969; Caprotti, 1970; Malatesta, 1974; Fekih, 1975; Caprotti, 1976; Marasti & Raffi, 1976; Pedriali, 1996), in order to conserve nomenclatural stability (Article 75.6 of the Code), we suggest that all type fixations for this species be set aside and a neotype be designated. Only two of the four shells in MSNM bear the numeral 68 written by Brocchi (in script identical to that of the original label) (Fig. 1A) and these specimens were almost certainly examined by him. One, i 4679 (Fig. 1H, I) is that indicated as 'holotype' of *N. helicina* by Rossi Ronchetti (1955) while the other i 4680 (Fig. 1B, C), also from Piacenza area, is in perfect accord with *Euspira helicina* of prevailing usage. We think it wiser to select the neotype from Brocchi's original material (i 4680, the *N. helicina* of authors) rather than the other specimen, i 4682, that is not so marked.

3. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all type fixations for the species *Nerita helicina* Brocchi, 1814 and to designate as neotype specimen i 4680 in Museo Civico di Storia Naturale di Milano (MSNM);
- (2) to place on the Official List of Specific Names in Zoology the name *helicina* Brocchi, 1814, as published in the binomen *Nerita helicina* and as defined by the neotype designated in (1) above.

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